

### **Remarks**

The Applicant submits the foregoing amendments and the ensuing remarks in reply to the Detailed Action mailed after the Applicant had appealed the Office's final rejection mailed 10/24/2007. For the reasons summarized herein, the Applicant respectfully submits that the claims are directed to patentably nonobvious invention such that they are allowable in all respects. The Office's favorable reconsideration of the claims is requested.

### **Claim Rejections - 35 U.S.C § 103**

With the Office Action, the Office re-opened prosecution of the application after Applicant's appeal and again rejected all of the pending claims. However, the Office did not explain the basis for re-opening prosecution of the case.

The Office found that claims 1-9, 26-35, 37, 41-44, 47, 49, 50, 53-56, and 62 were unpatentable over U.S. Patent No. 6,042,487 to Schrimmer et al. in view of U.S. Patent No. 5,066,011 to Dykstra et al. and U.S. Patent No. 6,422,960 to Touhey et al. Claims 10-14, 44-46, 51, and 52 were rejected as unpatentable over the six (6) combined references of Schrimmer et al., Dykstra et al., Touhey et al., U.S. Patent Application Publication No. 2005/00055873 of Gick, United States Patent Application Publication No. 2002/0173378 of Tinsman, and United States Patent Application Publication No. 2003/0054905 of King. Still further, claims 15-21, 48, and 57-59 were rejected as unpatentable in light of the combined references of Schrimmer et al., Dykstra et al., Tinsman, Touhey et al., Tinsman, and U.S. Patent No. 3,426,121 to Faulkner. Claims 22-25, 38-40, 60, and 61 were rejected as obvious in light of Schrimmer and Dykstra et al. when combined with

Touhey et al., U.S. Patent No. 3,426,121 to Cavallaro et al., U.S. Patent No. 4,463,951 to Kumasaka et al., and U.S. Patent Application Publication No. 2001/0002738 of Sullivan et al. For the reasons discussed below, it is respectfully submitted that allowance of all pending claims is warranted.

### ***Independent Claims 1 and 47***

In the Detailed Action, the Office rejected claims 1 and 47 indicating, among other things, that Touhey et al. teaches at least one corresponding surface deviation disposed relative to the inner surfaced of a spherical casing in a mating relationship with at least one surface deviation disposed relative to a spherical member of a core structure.

In response, the Applicant has amended claims 1 and 47 to point out most clearly the critical structural differences between the claimed invention and the teachings of Touhey et al. and the other cited prior art. More particularly, amended claims 1 and 47 require that the “outer surface of the spherical member and the inner surface of the spherical casing are in direct contact over substantially the entire outer surface of the spherical member and the inner surface of the spherical casing.” The claims further demand that there be “a plurality of surface deviations” and “a plurality of corresponding surface deviations.”

As such, claims 1, 47, and those that depend therefrom differentiate from Touhey et al. In the structure of Touhey et al., the outer surface of the “carcass 12” and inner surface of the “vessel 22” are clearly separated significantly. Under that structure, Touhey et al. could not function in the high impact environment for which Applicant’s game ball is designed. Furthermore, the “vessel filling tube 24” and the “gas release device 26” could not function to lock the “carcass 12” and the “vessel 22” together as do the interlocking surface deviations specifically claimed by the Applicant.

The Applicant’s claimed ball is fundamentally different and structure and function from even the combined prior art such that claims 1 and 47 are patentably distinct from the prior art. Furthermore, each dependent claim is allowable in that it depends from an allowable base claim and because it adds further patentable limitation thereto. The Office’s fair reconsideration of the claims is respectfully requested.

### ***Independent Claim 33***

The Applicant has also amended independent claim 33 to define still more clearly over the cited art. The Office makes the conclusory statements that Schrimmer's "elongate probe can be employed to provide power to the switching arrangement from exterior to the high impact game ball (figs. 1-3)" and that "the switching arrangement further comprises a rechargeable means for retaining power whereby the elongate probe can be employed to recharge the means for retaining power (see figs. 1-3, lines 14-49)." However, the Office fails to provide articulated reasoning for how the elongate probe in Schrimmer can possibly be employed to provide or transmit power.

As emphasized in the Office's "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*"<sup>1</sup>, a proper rejection under 35 U.S.C. 103 must have a "clear articulation of the reason(s) why the claimed invention would have been obvious." *Id.* at 57528. Mere conclusory statements cannot properly support an obviousness rejection, which must instead be founded on "'articulated reasoning with some rational underpinning'". *Id.* at 57528-9<sup>2</sup>.

Not only does Schrimmer not teach "a means for passing power through the elongate probe whereby the elongate probe can be employed to provide power to the switching arrangement from exterior to the high impact game ball" as is claimed by the Applicant, Schrimmer actually provides affirmative evidence that the Office's position is incorrect. Schrimmer unequivocally proves that the Office's position is untenable where it is written that one can "turn off or deenergize the LEDs 14,

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1 Federal Register, Vol. 72, No. 195, p. 57526-57535, October 10, 2007.

2 *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 127 S. Ct. 1727 (2007) (citing *In re Kahn*, 441 F.3d 977, 988,

16” by inserting “the **non-conductive plunger 36**” into the “opening 42 in the outer shell 40”. Col, 5, lines 44-47. (Emphasis supplied.) A non-conductive plunger by definition cannot transmit power. Indeed, As such, the plunger 36 *could not possibly* be employed to provide power to the switching arrangement from exterior to the ball as claim 33 demands.

Nonetheless, the Applicant has amended claim 33 to define even more clearly over the cited art. As amended, claim 33 requires that there be “means for passing power through the elongate probe *from exterior to the high impact game ball to the switching arrangement interior to the high impact game ball* whereby the elongate probe can be employed to provide power to the switching arrangement from exterior to the high impact game ball.” Even based on the Office’s added reasoning in response to Applicant’s arguments, such a means cannot in fairness be found or rendered obvious by Schrimmer or any of the other cited art.

Since the rejection of claim 33 is not well founded and could not be supported on appeal, the Applicant urges the Office to reconsider its rejection and allow claim 33 and each claim depending therefrom.

### ***Applicant’s Dependent Claims***

The Applicant submits that each dependent claim is allowable not only because depends from an allowable base claim but also because each dependent claim adds further patentable limitation thereto. By way of example and not limitation, a plurality of notable dependent claims are discussed below.

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78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

- **Claims 25 and 40**

In the Office's Response to Applicant's Arguments respecting claims 25 and 40, the Office wrote that Sullivan et al. discloses an aerogel at Paragraph [0091]. However, Paragraph [0091] never mentions an aerogel. There is no good basis for the rejection of claims 25 and 40, and the Office's reconsideration is requested.

- **Claims 2-5**

Claims 2-4 refine claim 1 in requiring that at least one surface deviation disposed relative to the spherical member of the core structure "comprises a rigid registration projection", then that the surface deviation "comprises a rigid post", and further that there are a plurality of rigid registration projections. Still further, claim 5 requires that each registration projection comprises a "metal post". Claim 49 also requires a rigid registration projection.

Schrimmer would most accurately be read to teach one skilled in the art away from the claimed "rigid registration projections". In Schrimmer, the "connectors 22, 24" are expressly and repeatedly described as being "flexible". Indeed, the flexibility of the "connectors 22, 24" is critical to their performance under Schrimmer's invention to allow the "connectors 22, 24" to deflect in response to the insertion of the "plunger 36". Notably, since Schrimmer's core structure is not spherical as Applicant's claims demand, Schrimmer would not need rigid registration projections to prevent relative movement of the "core portion 34" and the "outer shell 40". Schrimmer cannot in fairness be said to render a structure with a plurality of rigid metal posts obvious, particularly in light of the remaining limitations in claims 2-4 directly or by dependency.

Furthermore, Touhey et al.'s "vessel filling tube 24" and the "gas release device 26" would not

meet the limitations of claims 2 through 5 since they are not received in to registration indentations as Applicant's claims demand. Instead, they are received entirely through the outer sphere.

- **Claim 8**

Claim 8 has been amended to require that “the light source is activated *repeatedly* for a pre-determined time period after the impact” and is additionally patentable over even the combined references of Schrimmer and Dykstra. Since it is switched on and off by the “plunger 36”, it is clear that Schrimmer does not have an impact activated light source. Furthermore, Dykstra merely exhibits only a momentary flash of light and emission of sound. Under Dykstra, in the event of a jolt, “both the flashtube 24 and sound annunciator 26 [are] momentarily (and simultaneously) activated. The net result is that there is a short flash of light as well as a sound.” Col. 2, lines 39-42. To the contrary, claim 8 requires that the light source be activated “*repeatedly* for a pre-determined time period *after* the impact”, which is neither taught nor rendered obvious by Schrimmer and Dykstra, even when combined. Dykstra would instead teach one skilled in the art to induce only a simultaneous, momentary light activation, which is contrary to that claimed by the Applicant.

- **Claims 10-14, 45, 46, 51, and 52**

Claims 10 through 14 also enjoy independent patentability. Again pointing specifically to Paragraph 0019 and notwithstanding Applicant's earlier arguments, the Office found that U.S. Patent Application Publication No. 2005/0005873 of Gick discloses Applicant's remote activation by disclosing activation with “means for sensing a sound signal / *sound from vibration ...*.” However, this is simply not the case. Gick does not contemplate remote activation signals and merely discloses that the toy can “respond to the slight movement (such as that caused by a gentle push or

rocking) or vibration (such as that caused by striking a surface upon which the toy rests or by an animal walking near the toy).” Gick, Para. 0019. Neither of these activations is remote; both require the imparting of movement *directly* to the toy. Gick never teaches or suggests remote activation of any kind and certainly does not contemplate infrared or sound activation. As such, Gick cannot properly support a rejection of claims 10 through 14. These arguments apply with equal force to claims 45, 46, 51, and 52.

While the Office summarily concluded that Tinsman (U.S. 2002/0173378) discloses Applicant’s claimed infrared activation signal of claim 11 and amended claims 45 and 51 and the sound signal activation of claims 12, 46, and 52, there is no such disclosure in the reference. The Applicant’s careful review of the Tinsman disclosure shows that infrared activation and sound activation are nowhere disclosed or even suggested. To find otherwise simply represents impermissibly adding teachings to the prior art that do not exist. As noted previously, the Office’s Examination Guidelines issued in light of KSR International Co. v. Teleflex Inc., mere conclusory statements without articulated reasoning are insufficient to support an obviousness rejection. The Applicant urges the Office to reconsider its rejections and allow Applicant’s claims.

- **Claims 15-17 and 57**

It is further submitted that claims 15-17 and 57 are not anticipated or rendered obvious by even the combined references of Schrimmer, Dykstra, Faulkner, Tinsman, and Touhey et al. Touhey et al.’s filling and evacuation tubes do not teach or render obvious Applicant’s claimed “positioning stays” of claims 15-17 and the method for employing the same of claim 57. For example, they are not “substantially equal to a radial thickness of the spherical casing” as Applicant’s claims demand.

Instead, the outer sphere is a thin layer and the rods are much longer than the thin layer is thick.

- **Claims 19-21 and 59**

It again does not appear that the Office particularly addressed the patentability of claims 19-21 or 59, which require “a plurality of interior surface deviations disposed on the inner surface of the spherical shell and a plurality of corresponding exterior surface deviations disposed on the outer surface of the spherical casing whereby relative movement between the spherical shell and the spherical casing is prevented.” These claims thus require a spherical core member with outer surface deviations, a spherical casing with inner surface deviations and outer surface deviations, and a spherical shell with inner surface deviations. There is simply nothing in the prior art that can reasonably be said to teach or suggest such a claimed ball structure, and the Office has not even attempted to address the same. The same arguments apply to amended claim 59. Therefore, it is submitted that claims 19-21 and 59 enjoy further patentability.

### **Conclusion**

Because the prior art fails to teach or render the claimed invention obvious, the Applicant most respectfully submits that the claims now presented are patentable over the cited art. With this in mind, the Office’s reconsideration and allowance of the specification and claims 1-34 and 37-62 are respectfully requested.

The Applicant believes that all issues raised in the Detailed Action have been responded to fully. However, if, after consideration of the above amendments and comments, there remain any open issues in this application that possibly can be resolved by a telephone interview, then the



Applicant's undersigned attorney most respectfully requests that he be called to discuss and attempt to resolve those issues.

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Respectfully submitted,

/Thomas P. O'Connell Reg. No. 37,997/  
Thomas P. O'CONNELL, Esq.  
Attorney for Applicant  
Customer No. 20738  
(781) 643-1845

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/Thomas P. O'Connell Reg. No. 37,997/  
Thomas P. O'Connell, Esq.

May 18, 2009  
Date